



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/771,472

02/05/2004

Kenichi Sakamoto

NIT-408

2953

7590 09/27/2007  
Mattingly, Stanger & Malur, P.C.  
Suite 370  
1800 Diagonal Road  
Alexandria, VA 22314

EXAMINER

SCUDERI, PHILIP S

ART UNIT

PAPER NUMBER

2153

MAIL DATE

DELIVERY MODE

09/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/771,472

Applicant(s)

SAKAMOTO ET AL.

Examiner

Philip S. Scuderi

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08).  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

Claim 5 is objected to because of a minor informality. The claim recites "a session control request to be transfer to a second communication terminal", which should presumably read "a session control request to be transferred to a second communication terminal." Appropriate correction or clarification is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1-3, 6, 10, 11, 13, 16, and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by Mulahusic ("SIP Issues in Dual-stack Environments", Mulahusic et al., 2/27/2003).**

The Internet-Drafts Summary Sheet printed from <<http://www.ietf.org/proceedings/04mar/I-D/1id-index.txt>> establishes the publication date of the Mulahusic reference as "27-Feb-03" (see page 64 of the Summary Sheet). Thus, Mulahusic is not prior art under §102(b). But, Mulahusic is still prior art under §102(a).

As to claim 1, Mulahusic teaches a session control system (SIP server) comprising:

Art Unit: 2153

a control unit for performing a process of establishing a session between communication terminals (hosts) connected to an IP network [see Scenario I shown on pages 3-4 and in Figure 1];

a receiving unit for receiving, from a first communication terminal (e.g., Alice's host), a session control request packet (Invite) to a second communication terminal (e.g., Bob's host) [see Scenario I shown on pages 3-4 and in Figure 1]; and

a transmitting unit for transmitting a notification (e.g., "Error Try(IPv4)") to said first communication terminal (e.g., Alice's host) if an IP protocol version (IPv6) of said session control request packet (Invite) is different from an IP protocol version (IPv4) usable by said second communication terminal (e.g., Bob's host) [see Scenario I shown on pages 3-4 and in Figure 1].

As to claim 2, Mulahusic teaches that said receiving unit accepts a registration of the IPv4 and a registration of the IPv6 [see the first paragraph of Scenario I on page 3].

As to claim 3, Mulahusic teaches that said receiving unit receives a packet having each of registration information for an IPv4 terminal and registration information for an IPv6 terminal [see the first paragraph of Scenario I on page 3].

As to claim 6, Mulahusic teaches a communication terminal (e.g., Alice's host) connected to a session control system (SIP server) via an IP network and capable of communication using the IPv4 protocol and communication using the IPv6 protocol, comprising:

a transmitting unit for transmitting to said session control system (SIP server), by using the IPv4 or IPv6 protocol (IPv6), a session control request (Invite) for requesting a session control to a communication terminal (e.g., Bob's host) to be a communication partner [see Scenario I shown on pages 3-4 and in Figure 1]; and

a receiving unit for receiving a notification ("Error Try(IPv4)") indicating that the communication protocol (IPv6) used for said session control request (Invite) is different from a communication protocol (IPv4) communicable with the communication terminal (e.g., Bob's host) to be said communication partner [see Scenario I shown on pages 3-4 and in Figure 1], wherein

upon receiving the notification ("Error Try(IPv4)"), a session control request (Invite) for requesting a session control to the partner communication terminal (e.g., Bob's host) is transmitted again by using a communication protocol (IPv4) communicable with the partner communication terminal (e.g., Bob's host) [see Scenario I shown on pages 3-4 and in Figure 1].

As to claim 10, Mulahusic teaches a communication terminal (SIP server) capable of communication using a first communication protocol (IPv4) with another communication terminal (e.g., Alice's host) to be a communication partner connected via an IP network, comprising:

a receiving unit for receiving a session establishment request (Invite) transmitted from said another communication terminal (e.g., Alice's host) [see Scenario I shown on pages 3-4 and in Figure 1]; and

a transmitting unit for transmitting to said another communication terminal (e.g., Alice's host), if the session requested to establish uses a communication protocol (IPv6) other than the first communication protocol (IPv4), a notification ("Error Try (IPv4)") indicating that the session should be established by using said first communication protocol (IPv4) [see Scenario I shown on pages 3-4 and in Figure 1].

Art Unit: 2153

As to claim 11, Mulahusic teaches a network system comprising an IP network, first and second communication terminals (e.g., Alice's and Bob's hosts) each connected to the IP network, and a session control system (SIP server) connected to the IP network, wherein

said first communication terminal (e.g., Alice's host) has a transmitting unit capable of transmitting a session control request (Invite) to said second communication terminal (e.g., Bob's host) by using each of an IPv4 packet and an IPv6 packet [see Scenario I shown on pages 3-4 and in Figure 1], and

said session control system (SIP server) is comprised of:

a session control unit for establishing a session between said first and second communication terminals (e.g., Alice's and Bob's hosts) [see Scenario I shown on pages 3-4 and in Figure 1];

a receiving unit for receiving the session control request (Invite) transmitted from said first communication terminal (e.g., Alice's host) [see Scenario I shown on pages 3-4 and in Figure 1]; and

a transmitting unit for transmitting to said first communication terminal (e.g., Alice's host), if an IP protocol version (IPv6) of said session control request (Invite) is different from an IP protocol version (IPv4) usable by the second communication terminal (e.g., Bob's host), a notification ("Error Try (IPv4)") indicating that the IP protocols (IPv4 and IPv6) are different [see Scenario I shown on pages 3-4 and in Figure 1].

As to claim 13, Mulahusic discloses that the hosts register at their SIP servers [see the first paragraph of Scenario I on page 3]. It follows that the hosts must inherently send a packet to the server to perform this registration. Any registration packet from a dual-stack host (e.g., Alice's host) constitutes registration information for "an IPv4 terminal and registration information for an IPv6 terminal" as claimed.

As to claim 16, Mulahusic teaches a server (SIP server) connected to a first terminal (e.g., Alice's host), which is capable of transmitting and receiving both of a command (Invite) corresponding to a first communication protocol (IPv6) and a command (Invite) corresponding to a second communication protocol (IPv4), and to a second terminal (e.g., Bob's host) capable of transmitting and receiving either one of a command corresponding to said first communication protocol and a command corresponding to said second communication protocol (IPv4), comprising:

a receiving unit for receiving a command (Invite) transmitted from said first terminal (e.g., Alice's host) to said second terminal (e.g., Bob's host) [see Scenario I shown on pages 3-4 and in Figure 1];

a judging unit for judging whether said received command (Invite) is a command communicable with said second terminal (e.g., Bob's host) [see Scenario I shown on pages 3-4 and in Figure 1 (note that the IPv6 Invitation shown in Figure 1 stops at an SIP server because the "server ... can tell which IP version the target host is using")].

a transmitting unit for transmitting, if it is judged in said judging unit that said received command (Invite) is not of a protocol (IPv4) communicable with said second terminal (e.g., Bob's host), a command ("Error Try (IPv4)") notifying said first terminal (e.g., Alice's host) of the result of the judgment [see Scenario I shown on pages 3-4 and in Figure 1].

As to claim 17, Mulahusic teaches a terminal (e.g., Alice's host) connected to a communication partner terminal (e.g., Bob's host) capable of transmitting and receiving either one of a command (Invite) corresponding to a first communication protocol (IPv6) and a command

Art Unit: 2153

(Invite) corresponding to a second communication protocol (IPv4) via a server (SIP server), comprising:

a transmitting unit capable of transmitting a command (Invite) corresponding to said first communication protocol (IPv6) and a command (Invite) corresponding to said second communication protocol (IPv4) [see Scenario I shown on pages 3-4 and in Figure 1]; and

a receiving unit for receiving from said server (SIP server), a notification ("Error Try (IPv4)") indicating that the command (IPv6 Invite) transmitted from said transmitting unit is different from the command (IPv4 Invite) communicable with said communication partner terminal (e.g., Bob's host) [see Scenario I shown on pages 3-4 and in Figure 1].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4, 7, 8, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

#### **Mulahusic.**

As to claim 4, Mulahusic discloses that the hosts register at their SIP servers [see the first paragraph of Scenario I on page 3]. It follows that the hosts must inherently send a packet to the server to perform this registration. However, the reference does not expressly or inherently teach that such a registration packet is "an IPv4 packet or an IPv6 packet" as recited in the claim.

Art Unit: 2153

Nonetheless, the registration packets must have been formatted using some format compatible with the network. It would have been obvious for the ordinary artisan to try formatting the host's registration packets in the format the host is attempting to register, as the skilled artisan has good reason to pursue the known options within his or her technical grasp. And, it would have been well within the ordinary artisan's technical grasp to make the registration packets IPv4 and/or IPv6 packets because Mulahusic discloses throughout the reference that the hosts communicate other packets using IPv4 and/or IPv6.

As to claims 7-9, 12, 14, these claims are rejected using the same rationale discussed in regards to claim 7.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Zhang (U.S. Pub. No. 2004/0001509).**

Zhang teaches a session control system comprising:

a control unit for performing a process of establishing a session between communication terminals (20, 26) connected to an IP network [see fig. 1, ¶14];

Art Unit: 2153

a receiving unit for receiving, from a first communication terminal (20), a session control request packet (session initiation packet) to be transferred to a second communication terminal (26) [see fig. 1, ¶14]; and

a transmitting unit for transmitting, if an IP protocol version (IPv6) of said session control request packet (session initiation packet) is different from an IP protocol version (IPv4) usable by said second communication terminal (26), a packet obtained by converting an IP header (source address is part of the IP header) of said session control request packet (session initiation packet) to the IP protocol (IPv4) usable by said second communication terminal (26) [see fig. 1, ¶14].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (U.S. Pub. No. 2004/0001509) in view of Valli (U.S. Pub. No. 2005/0160183).**

Zhang teaches a network system comprising an IP network, first and second communication terminals each connected to the IP network, and a session control system connection to the IP network, wherein

said first communication terminal (20) has a transmitting unit capable of transmitting a session control request (session initiation packet) to said second communication terminal (26) by using an IPv6 packet and [see Zhang at fig. 1, ¶14];

Art Unit: 2153

said session control system is comprised of:

a session control unit for establishing a session between said first (20) and second (26) communication terminals [see Zhang at fig. 1, ¶14];

a receiving unit for receiving a session control request packet (session initiation packet) transmitted from said first communication terminal (20) [see Zhang at fig. 1, ¶14]; and

a transmitting unit for transmitting, if an IP protocol version (IPv6) of said session control request packet (session initiation packet) is different from an IP protocol version (IPv4) usable by the second communication terminal (26), a packet obtained by converting an IP header (source address is part of the IP header) of the session control request packet (session initiation packet) to an IP protocol (IPv4) usable by said second communication terminal (26) [see Zhang at fig. 1, ¶14].

Zhang does not appear to expressly disclose that the second communication terminal (26) is “capable of transmitting a session control request ... by using ... an IPv4 packet.”

It was well known in the art that most major operating systems include both IPv4 and IPv6 implementations [see Valli at ¶30]. It would have been obvious to one of ordinary skill in the art to provide Zhang’s second communication terminal (26) with IPv4 support so that it could communicate over IPv4 networks.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip S. Scuderi whose telephone number is (571) 272-5865. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

Art Unit: 2153

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Philip S. Scuderi/



GLENTON B. BURGESS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100